

Using Learning Progressions to Formatively Assess Students' Ability to Analyze Arguments

Presenters:

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Who We Are



Mary Fowles



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Yi Song

Overview

Part 1

- What is the *CBAL*[™] research initiative?

Part 2

- Using *CBAL* learning progressions to help students develop argumentation skills

Part 3

- Using the *CBAL Analyzing Arguments* tasks in the classroom

Part 4

- Questions and comments

Part 1

What is the **CBAL™** Research Initiative?

CBAL: Cognitively Based Assessment *of, for, and as* Learning

- *Of* learning: documents what students have achieved
- *For* learning: helps identify how to plan and adjust instruction
- *As* learning: is considered by students and teachers to be a worthwhile learning experience on its own

CBAL™ ELA Collaborations

- Middle Schools and High Schools
 - Portland, Maine
 - West Allis, Wisconsin (West Allis-West Milwaukee School District)
 - Waukesha, Wisconsin (Waukesha STEM Academy)
 - North Brunswick, New Jersey
- Teachers College Reading & Writing Project, Columbia University
- Institute for Student Achievement (ISA)
- Teachers from schools near Princeton, New Jersey

Part 2

Using *CBAL*[™] learning progressions
to help students develop argumentation skills

Why Teach Argumentation Skills?

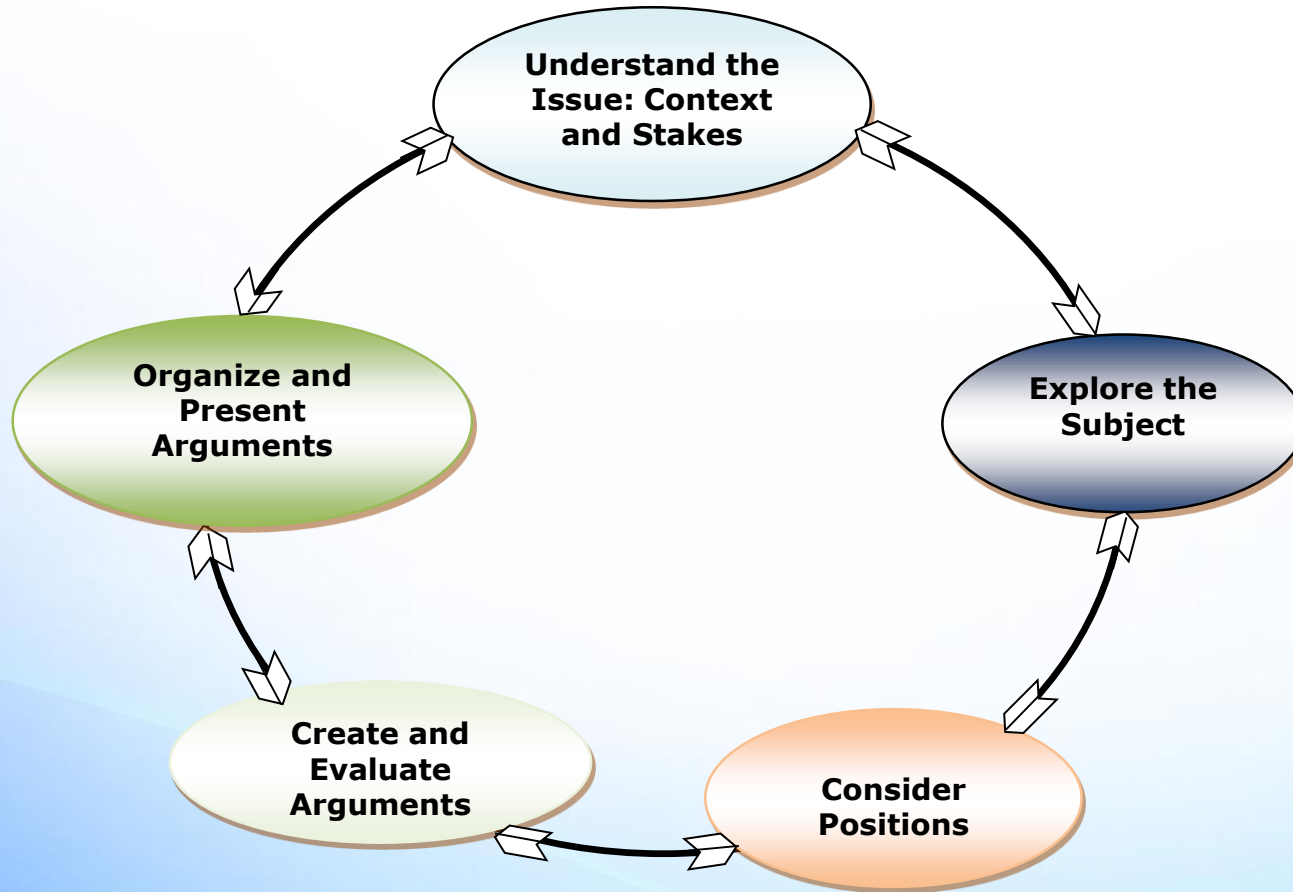
"Argument is part and parcel of what it means to be a citizen in a democracy. That is, when you teach your students to argue with logic..., you teach them to become discriminating and credible, influential and engaged."

Lucy Calkins, Mary Ehrenworth, & Annie Taranto.
The Research-Based Argument Essay, p. vi.

Sample Argumentation Standards in Common Core and Smarter Balanced

CCSS 4 th Grade	CCSS 8 th Grade	CCSS 11 th and 12 th Grades	Smarter Balanced Target
ELA-Literacy.RI.4.8 Explain how an author uses reasons and evidence to support particular points in a text.	ELA-Literacy.RI.8.8 Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.	ELA-Literacy.RI.11-12.8 Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning and the premises, purposes, and arguments in works of public advocacy.	Read informational texts: reasoning and evidence
Literacy.W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.	ELA-Literacy.W.8.1 Write arguments to support claims with clear reasons and relevant evidence.	ELA-Literacy.W.11-12.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	Write brief argumentative texts

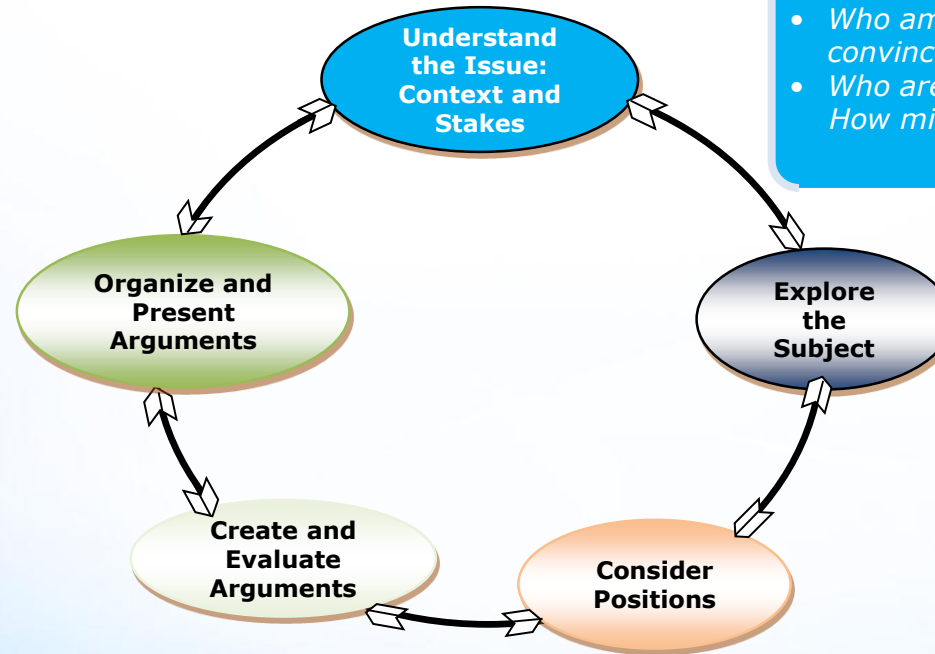
CBAL™ Argumentation Framework



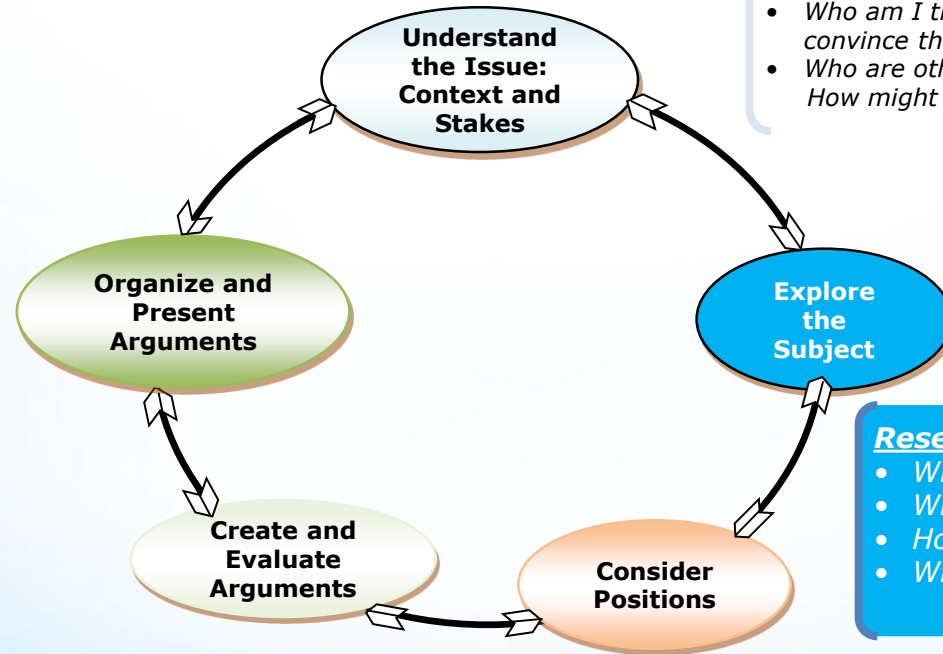
Skill Sets for the Argumentation Process

Appeal Building

- *Whose opinions about this issue matter?*
- *What do people who are interested in this issue care about?*
- *Who am I trying to convince? How will I convince them?*
- *Who are others trying to convince? How might they convince them?*



Skill Sets for the Argumentation Process



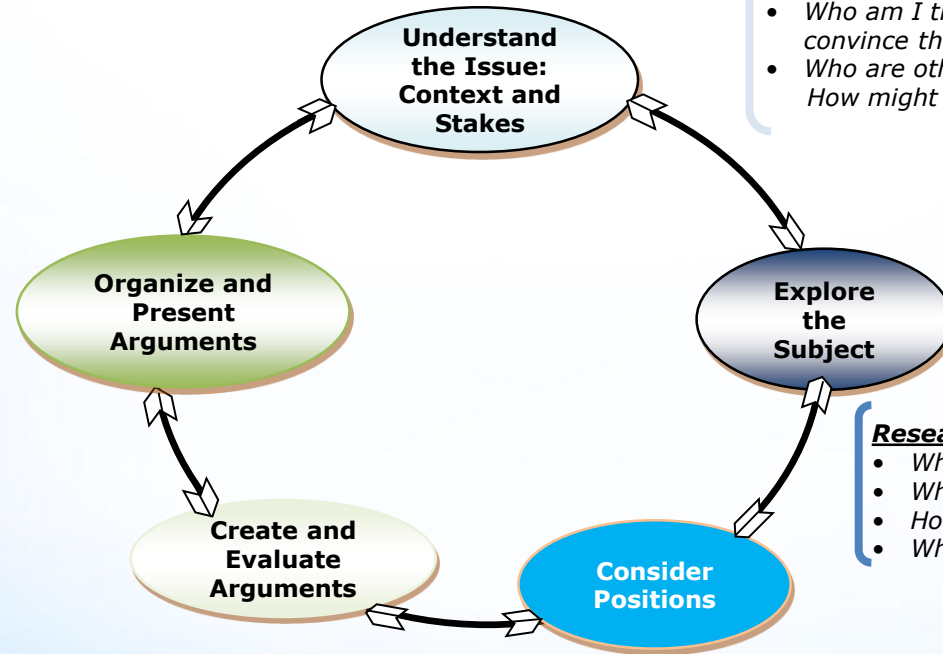
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Research and Inquiry

- *What do I know about the subject?*
- *What don't I know?*
- *How can I find out more?*
- *What information is relevant?*

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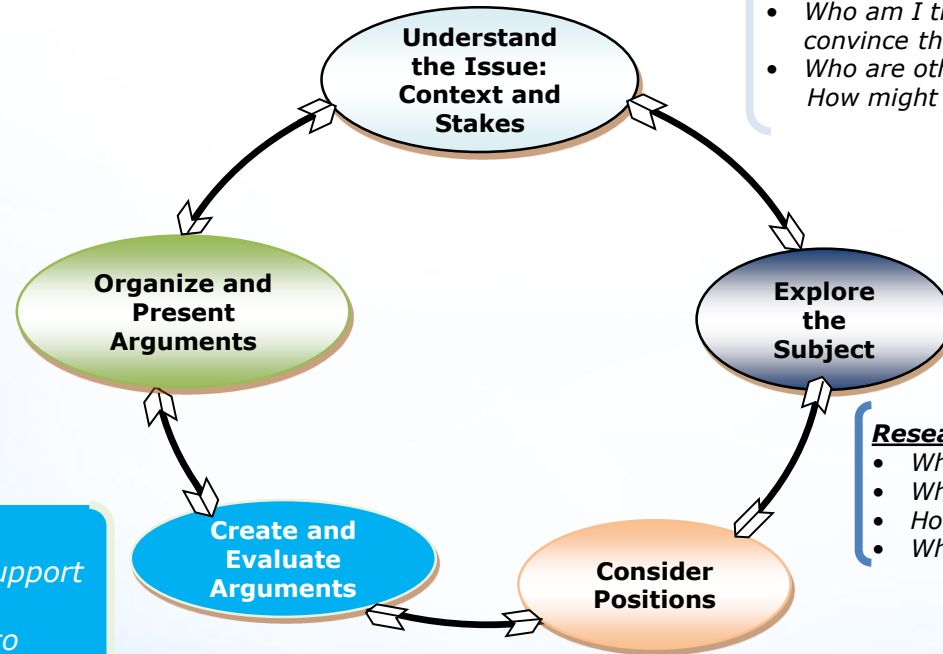
Research and Inquiry

- *What do I know about the subject?*
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- *How can I find out more?*
- *What information is relevant?*

Taking a Position

- *What positions are reasonable?*
- *Are they all clear and defensible?*
- *What position should I take?*
- *How should I focus and limit my position?*

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- What reasons can I use to support my conclusions?
- Do I have enough evidence to support each reason?
- What counterarguments should I address?

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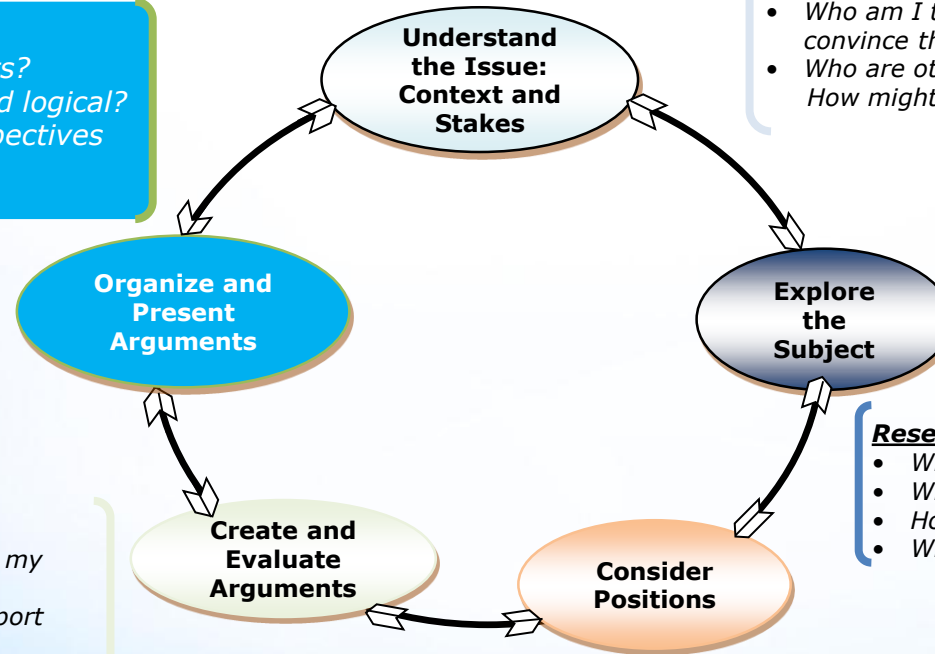
Skill Sets for the Argumentation Process

Framing a Case

- How should I present my arguments?
- What structure is most effective and logical?
- How will people with different perspectives present their arguments?

Appeal Building

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CBAL™ Learning Progressions

What is a learning progression?

- A description of qualitative change in a student's level of sophistication for a key concept, process, strategy, practice, or habit of mind

Why use learning progressions?

- They describe a ladder to mastery of each argumentation phase.
- They allow a teacher to think in terms of that ladder to describe qualitatively where a student stands.
- They can improve instructional planning by providing teachers information about student standing so that teachers can:
 - Set goals and adjust curriculum
 - Group students appropriately for instruction
 - Assign peers for collaboration

An Argumentation Learning Progression

Level	Reasons and Evidence
1	Understands the idea that <i>positions need to be supported with reasons</i> that will be convincing to the audience
2	<i>Recognizes, generates, and elaborates on reasons</i> in writing, with some awareness of the need for evidence, and uses one's own argument to counter others' argument in an engaging, familiar context
3	Understands use of evidence and <i>clearly grasps the need to provide evidence and reasons that are directly relevant</i> to and support the main point and which are <i>logically sound</i>
4	Understands the role of critique and rebuttal and is <i>able to reason about and respond to counterevidence and critical questions</i>
5	<i>Builds systematic mental models of entire debates</i> and uses that model to frame one's own attempts to build knowledge



Analyzing Arguments

Components:

- Five tasks that focus on different phases of the argumentation process
- Teacher's Handbook

Part 3

Using the *CBAL™ Analyzing Arguments* tasks in the classroom

Analyzing Arguments





Analyzing Arguments

- Introduction
- Pro and Con
- Claims, Reasons, and Evidence
- Facts and Opinions
- Errors in Logic
- Evaluating Arguments



Pro and Con

The first step in examining an argument is to figure out which side of an issue the writer is on. There are always at least two sides to an issue:

- Pro (for)
- Con (against)

No matter which side a writer takes, he or she needs to provide reasons and evidence to support that position.

Here are two different positions on the subject of longer summer vacations:

- **Longer summer vacations give students time to get fully involved in summer projects.** 
- **Longer summer vacations mean that students tend to forget much of what they learned the previous year in school.** 

- Essential basic terms for students beginning to work with argumentation

- Possible uses:
 - Project on a screen and use as the basis for a whole-group discussion
 - Print and distribute to students for partner work or small-group work

Pro and Con

Some reasons and evidence might seem convincing at first because they are related to the topic, but they *don't actually support any position* on the issue. These statements are

- Neither Pro Nor Con

Some reasons and evidence may have *nothing* to do with the subject at all. These statements are considered

- Off Topic (about a totally different subject)

Here are two other examples :

- **Summer vacations are more popular in the Northeast than in the Southwest.**
- **This summer is cooler than it was last summer.**

Neither Pro Nor Con — it's on the general subject of summer vacations, but isn't about longer summer vacations.

It is Off Topic — it's not on the subject of summer vacations at all.

- Second introductory screen expands concepts presented on previous one
- Introduces concepts of **neither pro nor con** and **off topic**
- Both introductory slides present specific examples of claims and evidence in these categories



Look at the following statements. Indicate whether each one

- supports a "pro" position on video games
- supports a "con" position on video games
- is neither pro nor con (refers to video games but does not help support a position) or
- is off topic (has nothing to do with video games)

If you change your mind, just click on another choice.

Video Games Are a Good Form of Entertainment for Kids	Pro	Con	Neither Pro nor Con	Off Topic
Video games improve problem-solving skills.				
Video games can keep gamers from getting enough exercise.				
Pac-Man, first released in 1980, is one of the most famous video games of all time.				
Playing video games together is a good way to make friends.				
Students often neglect schoolwork in order to play video games.				
Television is also a popular form of entertainment.				
Gamers do not interact enough with other people.				
A psychology article reports that playing video games can help children learn better in school.				
Video games can have disturbing content that might cause violent behavior.				

- The graphic organizer activity relates to concepts introduced on previous slides.
- The activity can be used as individual work, partner work, and/or whole-group work in order to formatively assess students.
- Students who are able to classify most statements successfully demonstrate competency at Level 1 of the learning progressions.



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Playing video games together is a good way to make friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Claims, Reasons, and Evidence

What is a claim? A claim is a statement that can be debated. Some people might agree with the claim; others might disagree. Look at the following example.

Claim: Our town should provide more activities for young teenagers.

What is a reason? A reason is a statement that helps explain why the claim is true.

Reason: Parents are not able to provide good after-school activities to help keep their teenage children out of trouble.

When you put the claim and reasons together, you have a clearly defined position (also called a thesis).

What is evidence? Evidence can be examples, facts, research results, expert opinion, or other information used to support the reasoning.

Together, the claim, reasons, and evidence make an argument.

But is it a good argument? How can you tell?

Evaluating Evidence

You need to examine the evidence in relation to the position. Does the evidence logically support the position? Does it do the opposite and actually weaken the position? Or does it not make a difference? Look at the following example.

Position: Our town should provide more activities for young teenagers because there is not enough for us to do.

Evidence that...

supports the position:

The local newspaper conducted a poll last month, and 80% of the parents said that their teenage children need more community organizations and activities that they can participate in.

weakens the position:

Last year, the town sponsored a Teen Night festival and a teenage hiking trip, but hardly anyone participated in either event.

neither supports nor weakens the position:

Some activities for kids take place in school, whereas others take place in the community.

- The introductory slide explains the concepts of evidence that **supports**, **weakens**, or **neither supports nor weakens** a position.
- Being able to evaluate evidence is essential for judging the effectiveness of an argument.



Decide whether the evidence supports the position, weakens it, or neither supports nor weakens the claim. Click on your answer.

Position: Technology is not necessarily a benefit because it can make our lives less secure.

Evidence: Government reports confirm that the computerization of credit card data and other personal information has made it easier for people to steal our identities.

- ☐ supports the position
- ☐ weakens the position
- ☐ neither supports nor weakens the position

- The activity asks students to work with concepts introduced on the previous slide.
- It is one in a series of six.

Extension activities:

- Students to think of additional evidence to support the position.
- Students create a pro/con chart for the position.

Next Steps

If your students need more support, consider:

- *Thesis Statement* task set (Level 1)

If your students CAN do both tasks, consider:

- Errors in Logic in *Analyzing Arguments* (Level 3)
 - Are your students aware of logical fallacies in their daily lives, and can they identify them in the exercises?
- Evaluating Arguments in *Analyzing Arguments* (Level 4)
 - Can your students apply criteria to give feedback on arguments?

Errors in Logic



Logical Fallacies

Ad Hominem: Switching from examining the issue to attacking someone who holds a different view

Bandwagon: Trying to convince the audience not with logic or evidence but with an appeal to "get on the bandwagon" —to do or think what everyone else is doing or thinking

Either/Or: Failing to consider alternative explanations. The person making the argument acts as though there are only two possibilities, so if one is not true the other must be.

Hasty Generalization: Jumping to a broad conclusion from limited evidence

Correlation/Causation: Thinking that because one event followed another, the first event must have caused the second

Red Herring: Changing the subject or raising a new issue to distract the audience and shift attention from the main issue

Evaluate the argument in the bubble below. If you think the argument is logical, select "OK — Good Argument." If you think it is flawed, select the fallacy it demonstrates.

Select ▼



- The activity introduces six common logical fallacies.
- After students have worked through and absorbed these concepts, the activity can be extended by creating skits that illustrate fallacies.

Evaluating Arguments

ETS CBAL

Question 1 of 4

Barry's Letter

Argument Tips

Dear Editor,

I propose that our town build an amusement park in the area that is now empty space. Everyone who lives here would enjoy an amusement park. It would also attract lots of people from other areas. Your paper frequently reports on economic problems that we've been having this past year, and an amusement park would help solve those problems. Other towns around us have built their own amusement parks, so we should, too.

Directions: Read Barry's letter on the left.

Which of the following *positive* statements best applies to Barry's argument? Select one.

- ☐ It gives a clear position on how the empty space should be used.
- ☐ It gives specific details that describe what the amusement park might look like.
- ☐ It gives several reasons that explain why people from other towns would come to the park.

Which is the best feedback statement for *improving* Barry's argument? Select one.

- ☐ Mention a company that could build the park, propose a date for when construction should begin, and suggest a good name for the amusement park.
- ☐ Explain why the town has been having such serious financial problems this past year.
- ☐ Give evidence to support your claims that everyone would enjoy the park and that it would help the town's economy.

- The activity is scaffolded.
- Students first choose feedback from a list of options.
- Next, students write their own feedback on another letter with a different subject.

Argument Tips

The screenshot shows the ETS CBAL interface. At the top, there is a purple header with the ETS CBAL logo on the left and a navigation bar on the right containing icons for a home page, a document, and navigation arrows. Below the header, the main content area has a green box titled 'Evaluating Arguments'. Underneath this, there are two tabs: 'Introduction' and 'Argument Tips', with the latter being selected. The 'Argument Tips' tab contains the following text:

Tips for Giving Feedback on an Argument

Read the argument carefully. Then ask yourself these questions:

- Does the writer state a clear position on the issue?
- Does the writer develop an argument using **relevant** reasons to support his or her position?
- Does the writer consider other points of view and explain why his or her position is better?
- Are any parts of the argument confusing or inappropriate?
- What important questions did the writer not consider?

Now you should be in a good position to give useful feedback.

- The tips provide a resource to support students' learning.
- A printable handout is available in the handbook.

Part 4

Summary and questions

Summary

- Argumentation can be conceptualized as a sequence of stages for students to master.
- *CBAL*[™] learning progressions can help teachers identify students' level of mastery of skills at each phase.
- Tasks in *Analyzing Arguments* can help teachers determine students' strengths and needs and plan for future instruction.

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✓ Posted with Distinction

Hide ⤴

Analyzing Arguments: CBAL (TM) Formative Activity Set and Teacher Handbook



This resource includes a set of tasks and a teacher handbook to support classroom instruction in helping students understand some of the...

Subjects: ELA - Reading Informational Text, ELA - Writing

Grades: 6 - Sixth Grade, 7 - Seventh Grade, 8 - Eighth Grade, 9 - Ninth Grade, 10 - Tenth Grade

Media Types: Interactive

👁 1,377 ⬇ 0 ★★★★★ (1)

Romeo and Juliet: CBAL (TM) Formative Activity Set and Teacher Handbook



This resource includes a set of tasks and a teacher handbook to support classroom instruction in helping students understand literary...

Subjects: ELA - Reading Literature, ELA - Writing, ELA - Language

Grades: 9 - Ninth Grade, 10 - Tenth Grade

Media Types: Document, Interactive

👁 358 ⬇ 0 ★★★★★ (0)

Summarization: CBAL (TM) Formative Activity Set and Teacher Handbook



This resource includes a set of tasks and a teacher handbook that support students as they develop an understanding of the basic...

Subjects: ELA - Reading Informational Text, ELA - Writing

Grades: 6 - Sixth Grade, 7 - Seventh Grade, 8 - Eighth Grade, 9 - Ninth Grade

Media Types: Interactive

👁 850 ⬇ 0 ★★★★★ (1)

Thesis Statement: CBAL (TM) Formative Activity Set and Teacher Handbook



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Subjects: ELA - Reading Informational Text, ELA - Writing

Grades: 7 - Seventh Grade, 8 - Eighth Grade, 9 - Ninth Grade, 10 - Tenth Grade

Media Types: Document, Interactive

👁 1,171 ⬇ 0 ★★★★★ (2)

Questions and Comments

If you have any questions or comments, please continue to submit them to the chat box until the end of the presentation.

Spotlight Forum May 4-8

- Navigate to *Analyzing Arguments: CBAL™ Formative Activity Set And Teacher Handbook* in the Digital Library.
- Click on the Collaboration tab below the preview window.
- Click on the *Spotlight Forum May 4-8* card.
- Join the conversation.

